

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2011 – 2012 & thereafter)
SUBJECT CODE: 11CM/PC/CC14

M.Com. DEGREE EXAMINATION NOVEMBER 2013
COMMERCE
FIRST SEMESTER

COURSE : MAJOR CORE
PAPER : COST DETERMINATION AND COST CONTROL
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

I. ANSWER ALL QUESTIONS: (10 x 2 = 20 Marks)

1. What do you mean by prime cost?
2. Explain the term labour turnover.
3. What is meant by machine hour rate?
4. Write a note on inter process profits.
5. What is contract costing?
6. Compute total labour cost for the month of April 2013 :
Cost per month

Basic Salary	Rs 8000
Dearness Allowance	10% of Basic
Leave Salary	5% of Basic
Employer's Contribution to Provident	10% of Basic plus Dearness allowance
7. Calculate the overhead allocable to production departments A and B from the following:
There are two service departments X and Y. 'X' renders service to A and B in the ratio of 3:2 and 'Y' renders service to A and B in the ratio of 9:1. Overhead as per primary overhead distribution is:
A-Rs.49,800; B-Rs.29,600; X-Rs.15,600; Y-Rs.10,800.
8. Calculate the Economic order quantity from the following particulars:
Annual usage 20,000 units
Buying cost per order Rs.10
Cost per unit Rs.100
Cost of carrying inventory 10% of cost.
9. The following expenditure is incurred for producing some articles:
Materials (200 units) Rs 7,000
Labour Rs 4,000
Indirect expenses Rs 3,000
Normal wastage is 7% of the input. One unit of wastage is sold at Rs.20 each. Prepare process account.

10. A transport company operates 5 buses on a route 120 kms. long. Each bus makes three round trips per day on all 30 days in a month. On an average 10% of the vehicles are in garage for repairs and maintenance. You are required to ascertain the total distance covered by buses in one month period.

SECTION – B

II. ANSWER ANY FIVE QUESTIONS: (5 x 8 = 40 Marks)

11. The following data were collected relating to the manufacture of a standard product during the month of April 2012:

Raw material	Rs 80,000
Direct wages	Rs 48,000
Machine hours worked	8,000 hours
Machine hour rate	Rs. 4
Administration overheads	10% of works cost
Selling overheads	Rs 1.50 per unit
Units produced	4,000
Units sold	3,000
Selling price	Rs 50 per unit

Prepare a cost sheet in respect of the aforementioned data showing

(a) Cost per unit and (b) Profit for the month of April 2012

12. Two component X and Y are used as follows:

Minimum usage	: 50 units per week each
Maximum usage	: 150 units per week each
Normal usage	: 100 units per week each
Ordering quantities	: X-600 units Y-1,000 units
Delivery period	: X-4 to 6 weeks Y-2 to 4 weeks.

Maximum reorder period for emergency purchases X : 2 weeks Y : 2 weeks.

Calculate for each component:

(a) Reorder level (b) Maximum level (c) Minimum level (d) Danger level

13. Samson & co., produces a product through two processes 'R' and 'S'. The following details pertaining to process 'R' and 'S' for January 2013 are as follows:

Inputs :	R (Rs.)	S (Rs)
Materials (500units)	10,000	100 units at Rs. 5 per unit
Labour	8,000	10,000
Indirect expenses	7,000	9,000
Normal loss	5%	10%
Scrap value	Rs.3 per unit	Rs. 2 per unit
Output (in units)	460	525

Prepare the process accounts and abnormal loss / gain account.

14. The following was the expenditure on a contract for Rs 6,00,000 commenced in January, 2012:

Material	1,20,000
Wages	1,64,400
Plant	20,000
Business charges	9,000

Cash received on account to 31st December 2012 amounted to Rs 2,60,000 being 80% of work certified; the value of materials in hand on 31-12-2012 was Rs 25,000.

Prepare the contract account for 2012 showing the profit to be credited to the year's profit and loss account. Plant is to be depreciated at 10%.

15. Calculate the normal and overtime wages payable to a workman from the following data:

Days	Hours worked
Monday	8
Tuesday	12
Wednesday	10
Thursday	10
Friday	9
Saturday	4
	53

Normal working hours – 8 hours per day; on Saturday – 4 hours.

Normal rate Rs.2 per hour.

Overtime rate – up to 9 hours in a day at single rate and over 9 hours in a day at double rate or up to 48 hours in a week at single rate and over 48 hours at double rate, whichever is more beneficial to the workers.

16. Work out the machine hour rate for the following machine whose scrap value is 20,000.

- (i) Cost of machine Rs.3,60,000
- (ii) Freight and installation Rs.40,000
- (iii) Working life:20 years
- (iv) Working hours :8,000 per year
- (v) Repair charges : 50% of depreciation
- (vi) Power:10 units per hour @ 10 paise per unit
- (vii) Lubricating oil @ Rs.2 per day of 8 hours
- (viii) Consumable stores @ Rs.10 per day of 8 hours
- (ix) Wages of operator @ Rs.4 per day

17. From the following data calculate the cost per mile of a vehicle.

	Rs.
Value of vehicle	15,000
Road licence for the year	500
Insurance charges per year	100
Garage rent per year	600
Driver's wages per month	200
Cost of petrol per litre	8
Miles per litre	8
Proportional charges for tyre and maintenance per mile	20
Estimated life	1,50,000 miles
Estimated annual mileage	6,000miles

18. Prepare statement of equivalent production, statement of cost and process account from the following information:

Units introduced	7,600
Output (units)	6,000

Rs

Process cost:

Materials	14,560
Labour	21,360
Overheads	14,240

Degree of completion of closing work-in-progress:

Materials	80%
Labour	70%
Overheads	70%

SECTION – C

III. ANSWER ANY TWO QUESTIONS:

(2 x 20 = 40 Marks)

19. From the following information prepare a cost sheet for the month of Dec.2012:

	Rs
Stock on hand – 1 st Dec.2012: Raw materials	25,000
Finished goods	17,300
Stock on hand – 31 st Dec.2012: Raw materials	26,200
Finished goods	15,700
Purchase of raw materials	21,900
Carriage on purchases	1,100
Work-in-progress 1.12.2012 at works cost	8,200
Work-in-progress 31.12.2012 at works cost	9,100
Sale of finished goods	72,300
Direct wages	17,200
Nonproductive wages	800
Direct expenses	1,200
Factory overhead	8,300
Administration overheads	3,200
Selling and distribution overheads	4,200

20. From the particulars given below write up the stores ledger card:

2012

January 1	Opening stock	1,000 units at Rs.26 each
5	Purchased	500 units at Rs.24.50 each
7	Issued	750 units.
10	Purchased	1,500 units at Rs.24 each
12	Issued	1,100 units
15	Returns to supplier	100 units purchased on 10th
17	Issued	500 units
18	Returns from Production department	out of issue made on 07 th , January 50 units
25	Purchased	1,500 units at Rs.26 each
29	Issued	1,500 units
30 th	Shortage	10 units

Adopt the FIFO and LIFO method of issue and ascertain the value of the closing stock.

21. In an engineering factory, the following particulars have been extracted for the year ended 31-12-2012. Compute the departmental overhead rate for each of the production departments, assuming that overheads are recovered as a percentage of direct wages.

Particulars	Production department			Service department	
	A	B	C	X	Y
Direct wages [Rs.]	30,000	45,000	60,000	15,000	30,000
Direct materials [Rs.]	15,000	30,000	30,000	22,000	22,500
Staff number	1,500	2,250	2,250	750	750
Electricity [Kwh]	6,000	4,500	3,000	1,500	1,500
Assets value [Rs.]	60,000	40,000	30,000	10,000	10,000
Light points	10	16	4	6	4
Area [Sq.meters]	150	250	50	50	50

The expenses for the period were:

Power	Rs.1,100	Depreciation	Rs.30,000
Lighting	Rs.200	Repairs	Rs.6,000
Stores overheads	Rs.800	General overheads	Rs.12,000
Staff welfare expenses	Rs.3,000	Rent & taxes	Rs.550

The expenses of Service Department are apportioned to the Production department on the following basis:

	A	B	C	X	Y
Department X	30%	30%	20%		20%
Department Y	40%	20%	30%	10%	

22. M Ltd manufactures a product through three distinct processes. The output of each process is transferred to the next process or finished stock account as the case may be at a profit of 20% on transfer price. The following data are available.

Particulars	Processes			Finished Stock
	R Rs.	S Rs.	T Rs.	
Materials consumed	70,000	1,05,000	35,000	---
Labour	1,05,000	70,000	1,40,000	---
Closing stock	35,000	70,000	1,05,000	70,000
Sales	---	---	---	6,30,000

Stocks in each processes are valued at prime cost and in the finished stock at the price at which the goods are received.

You are required

- To prepare process accounts showing profit at each stage.
- To ascertain the total realized profit.
